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UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

SOUTHWESTERN REGION

Post Office Building
Albuquerque, New Mexico

S
CONTROL, R-3
Insect
Annual Report
1943

March 20, 1944

Chief
Forest Service
Washington 25
D.C.

Dear Sir:

The annual reports of Forest insect damage from the Forest Supervisors and reports from individual Forest officers travelling through the Region indicate that conditions were normal during 1943, except as shown in the following:

BARK BEETLES (Dendroctonus and Ips)

The reports from nine of the forests (Apache, Coconino, Cibola, Coronado, Crook, Gila, Lincoln, Santa Fe and Sitgreaves) indicate that damage from bark beetles was normal or below normal for the year. Damage by bark beetles on the Carson was normal on the forest except for the area in Agua Caliente drainage where control work was done during the spring of 1942, and an area within the Rancho del Rio Grande Grant. The bark beetles doing the damage in Agua Caliente drainage have been identified as Black Hills beetles (Dendroctonus ponderosae Hopk.). Ranger David O. Scott made an examination of this area during October, 1943, and found that the Black Hills beetles were present in sufficient numbers to cause group killings of from two to five trees. There were also several groups of ponderosa pine on the Rancho del Rio Grande Grant which were apparently killed by the Black Hills beetles. These areas where the group killings have occurred will be watched closely during the next year and, if necessary, plans for control work will be made and the work done if funds and manpower can be made available. No control work was done on either of these areas during 1943.

Ips oregoni (Eichh.) continue to kill groups of small poles, saplings and reproduction of ponderosa pine on the timber sale areas both on the Forest and Grant lands. The Ips also attacked the pinon pine along the lower edge of the ponderosa pine type on the Grant lands where several groups of pinon were killed.

Dr. Craighead

The Kaibab reports that occasional widely scattered individual trees and a few groups of trees have died during the year in the forest north of the Grand Canyon. Conditions on this area will be watched and groups examined during the coming field season.

The report from the Prescott states that damage by Dendroctonus and Ips in the forest in the vicinity of Prescott during 1943, was above normal. The kill on these areas was fairly heavy during the spring of 1943, while the attacks and kill during the summer and fall were only normal. Damage on the Horsethief Basin area of the Crown Creek Ranger District was below normal for the past year. This area has been one of the hot spots of damage by bark beetles in the Region during the past several years.

The report from the Tonto Forest shows that insect damage is normal on the forest except on the cutting areas of sawtimber sales in the vicinity of Young, Arizona. Ips have attacked and killed groups of small poles, saplings and reproduction on these areas.

TIP MOTH (Rhyacionia neomexicana Dyar.)

The damage by tip moth during the year has been about normal throughout the Region.

SPRUCE BUDWORM (Archips fumiferana Clem.)

The damage by the spruce budworm on the Carson and Santa Fe Forests was about normal during the year, while on the Sandia District of the Cibola Forest the damage increased some and spread to new areas. This damage was not noticeable in the Sandia's until about three years ago. The damage occurs principally in white fir (Abies concolor, Lindley & Gordon). In past years this area has been a source of supply of white fir Christmas trees and greens for Albuquerque and surrounding towns. Severe defoliation of the white fir trees by the spruce budworm destroys their value as Christmas trees.

ASPEN LEAF ROLLER (Archips conflictana Walker)

The aspen leaf roller was first reported from the Carson Forest during 1941. It has also been found on the Santa Fe and Cibola Forests. It does not appear to attack and defoliate trees on the same area the second year but travels on to adjacent areas. Ranger David O. Scott who has charge of the Rio Pueblo Ranger District of the Carson Forest where the leaf roller was first found has made a supplemental study of this insect for this area. The following paragraph is taken from his annual insect report for his district:

> "The aspen leaf roller (Archips conflictana (Walker), continued to defoliate areas adjacent to 1942 defoliations. Apparently, old areas are soon brought under control by predators and parasites, as the polyembryonic parasite, Macrocentrus amicroploides Vier., and Herpestonus hariolus (Cres) were found in about 75 percent of the cocoons collected from the periphery of old infestations. General moth emergence from larvae collected in the last instar, was on July 4. This emergence is about 20 days earlier than in 1941, when we had a very late, wet spring season."

The leaf roller is found pretty generally throughout the aspen areas on the Carson, Santa Fe and Mt. Taylor Division of the Cibola. The attacks by the leaf roller in the aspen results in a rather severe defoliation; however, very few trees appear to have been killed by these attacks.

GREAT BASIN TENT CATERPILLAR (Malacosoma fragilis)

The reports from the forests show that the attacks by these caterpillars have nearly died out. Examination was made by Assistant Supervisor Wang of areas where the parasite fly (Compsilura concinata) and the predator beetles (Calosoma sycophanta) were liberated during 1942. Only a few caterpillars were found and no traces of the parasitic flies or predator beetles. These areas will be examined again next summer to determine if the flies and beetles have survived and become established.

MATSUCOCCUS SCALE

The Prescott Forest reports heavy damage by these insects in the forest around Prescott during 1943. The damage varied from light to as heavy as the damage of 1933.

No examinations or inspections were made in the Region during the year by entomologists from the Bureau of Entomology.

Very truly yours,

FRANK C. W. POOLER, Regional Forester

By: GEORGE W. KIMBALL Acting